

**City of Victorville Position Description**  
**Signal Technician II**

**SIGNAL TECHNICIAN II**

**DEFINITION**

Under technical and functional supervision, performs skilled electrical and electronic maintenance work in the installation, maintenance, repair, overhaul and adjustment of electrical and electronic traffic signals, traffic signal coordinated systems, video/induction detection, preemption systems, battery back-up systems, and flashing beacons.

**DISTINGUISHING CHARACTERISTICS**

Incumbent performs skilled work independently and is subject to inspection of work in progress and upon completion. Receives general, technical and functional supervision from the Traffic Signal Supervisor. This classification is distinguished from the Signal Technician I by the increased level of responsibility for a wide variety of technical repair to solid-state traffic signal equipment.

**ESSENTIAL DUTIES AND RESPONSIBILITIES**

Coordinates the installation of specialized intersections, safety lighting and interconnect systems; installs, maintains, inspects and repairs traffic signal systems; diagnoses malfunctions, including sensing mechanisms, signal circuits, controllers, relays, actuation devices, loop detection systems and other related electrical apparatus; understands and configures proper amps loading to circuits; reviews construction work in progress and upon completion; reads and interprets electrical plans, specifications, blueprints and sketches; assists in the design, construction and modification of new and existing traffic control systems; tests and trouble-shoots traffic signal systems for malfunctions; pulls, splices, strings and terminates wiring and cables; ; interfaces with contractors and clients; estimates labor and materials for minor electrical installations and repairs; utilizes computer and computer software; prepares reports of time and material expended; operates power tools commonly used in utility work; requisitions parts and supplies; performs heavy manual labor; works at considerable height above the ground from ladder and tower trucks; operates city vehicles in a safe and efficient manner; routinely adheres to and maintains a positive attitude; establishes and maintains cooperative working relationships with internal and external customers, including outside agencies; responds to emergency call-outs; works an irregular schedule which may include evenings, weekends and holidays; and performs related duties as required.

**EMPLOYMENT STANDARDS**

**Training & Experience** - Graduation from high school, or GED equivalent, supplemented by 15 college semester units in Basic Electricity or Electronics and three years of experience in traffic signal and street light maintenance. Completion of college-level courses in electronics may substitute for experience on a year-for-year basis equal to 30 semester units equal up to a maximum of one year.

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**Knowledge & Abilities-Knowledge of:** NEC electrical circuitry and electronics as they relate to traffic signal and lighting systems; methods, materials, tools and equipment used in the installation, maintenance and repair of traffic control devices; induction detection, frequency and sensitivity settings; functional programming of Opticom Preemption System; video detection and program detection zones; uploading/downloading zone configurations, and firmware revisions to controllers; loading programs for both video and battery back-up systems; appropriate safety precautions and procedures; basic electrical and electronic theory and shop mathematics applicable to the electrical trade; solid state circuitry; and applicable laws, codes and regulations.

**Ability to:** read and work from As-Builts diagrams, blueprints, plans and electrical and signal specifications; climb and work safely at considerable height above the ground in a hydraulic man-lift and ladders; perform manual labor in varying weather conditions; work independently in the field; operate power tools and diagnostics equipment; utilize a computer and computer software; understand and carry out oral and written instructions; and establish and maintain effective relationships with those contacted in the course of work.

**Licenses and Certificates** – Possession of a valid Class “C” California driver’s license. Must be able to obtain a valid California Class “B” driver’s license within twelve months of appointment. Must possess International Municipal Signal Association (IMSA) certification Level I. Must be able to obtain IMSA Level II within twelve months of employment.

### **WORKING CONDITIONS**

Work is performed in a variety of environmental conditions, indoors and out, with wide temperature variations, noise, vibrations, fumes, odors and moderate exposure to dust, extreme temperatures, noise and inclement weather and occasional exposure to hazardous work conditions. Incumbent must have the mobility to visit various job sites on a daily basis. Some heavy lifting and other physical exertion required. Incumbent must be able to see and hear in the normal range with or without correction, and communicate verbally and in written form with great facility and must be able to be understood. Incumbent will be required to respond to emergencies after regular working hours and on weekends and must be flexible to meet the needs of the community by working varying shifts. Must possess the stamina to work long hours and overtime if necessary.

**APPROVED:**   
**DIRECTOR OF HUMAN RESOURCES**

**DATE:** June 13, 2005

Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.  
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